

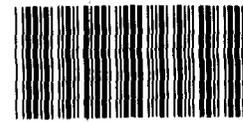
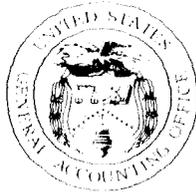
GAO

Report to the Chairman and Ranking
Minority Member, Subcommittee on
Census and Population, Committee on
Post Office and Civil Service, House of
Representatives

May 1990

1990 CENSUS

Costs Are Uncertain Because Wage Rates May Be Uncompetitive



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General Government Division

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May 1, 1990

The Honorable Thomas C. Sawyer
Chairman, Subcommittee on Census
and Population
Committee on Post Office and Civil Service

The Honorable Thomas J. Ridge
Ranking Minority Member
Subcommittee on Census
and Population
Committee on Post Office and Civil Service
House of Representatives

This report responds to your request that we examine the Bureau of the Census' program for using geographic pay rates for temporary positions in the Bureau's 449 district offices during the 1990 census. We specifically reviewed whether the Bureau has identified sources to fund its geographic wage rates and examined the process the Bureau used to establish its pay rates. We provided preliminary information on these issues to the Subcommittee on December 15, 1989.

In our March 27, 1990, testimony before the Subcommittee,¹ we discussed how uncertainty about the competitiveness of the geographic pay rates raises concerns about the Bureau's ability to attract and retain sufficient staff. In previous censuses, the Bureau had difficulties recruiting and retaining employees in some geographic areas, which contributed to delays and increased costs in completing key census field activities.

The Bureau had planned to hire about 285,000 employees for peak census operations, based on its budgeted 70 percent mail response rate for census questionnaires. However, the Bureau did not achieve the expected response rate. The Bureau reported a 63 percent response rate on April 19—the date at which the Bureau created its address list for follow-up in urban offices. The address list for follow-up in suburban and rural offices was generated by the district offices during the week of April 23.

The Bureau estimates that it will need to hire about 5,300 additional employees for follow-up activities for every percentage point below the

¹The Decennial Census: Potential Risks to Data Quality Resulting from Budget Reductions and Cost Increases (GAO/T-GGD-90-30, Mar. 27, 1990).

budgeted response rate. As a result, the Bureau may need to hire as many as 37,100 additional employees to address the expanded workload. Peak hiring for the census will be from April to June 1990, with some hiring continuing until September 1990. Fieldwork for nonresponse follow-up,² the most labor-intensive census activity, began in urban offices on April 26 and is scheduled to begin May 3 in suburban and rural offices.

Results in Brief

We believe that the Bureau's decision to implement a geographic wage program is an important advance over its previous pay plans and should help it compete for needed staff. The Bureau identified sources of funding to meet the approximately \$50 million in increased costs that it estimated would be needed to increase wages under its geographic wage program. However, these estimated costs were based on the expected 70 percent census questionnaire response rate.

The costs of the geographic wage program will now increase because the Bureau must hire additional staff to handle the increased workload caused by the 63 percent response rate. Before the Bureau implemented the geographic wage program, it estimated that each percentage point below the expected response rate leads to about \$10 million in additional follow-up costs, which primarily are personnel costs. The Bureau has not released estimates of how much the increased wages under the geographic wage program will add to that amount. However, census costs clearly will increase to address the low response rate—unanticipated follow-up efforts could increase census costs by \$70 million, which does not include the costs resulting from the increased wages provided by the geographic wage program.

Moreover, the geographic wage program is vulnerable to further cost increases as census hiring continues. The Bureau did not have the opportunity to test its geographic pay rates under census-like conditions because the wage program was not implemented until after the Bureau had completed its field tests for the 1990 census. The Bureau therefore may find that its pay rates are not competitive in some areas as significant hiring for the census continues. In the past, the Bureau has had to raise pay while field activities were ongoing to attract sufficient staff. The Bureau said that if it needs to raise wages during the census, it will

²For nonresponse follow-up, the Bureau hires enumerators to obtain completed census questionnaires from households for which a questionnaire was not received by mail.

have to alter census plans to absorb the additional costs or request additional funding from Congress.

Objectives, Scope, and Methodology

The objectives of our work were to (1) determine whether the Bureau has identified sources to fund its geographic wage rates and (2) examine the process the Bureau used to establish its pay rates. To meet the first objective, we reviewed budget documents showing the sources the Bureau has used to fund the geographic wage rates and reviewed how the Bureau reprogrammed those funds into the appropriate census accounts. We did not verify the Bureau's projection of the total costs of using the wage rates once they were established.

To meet the second objective, we reviewed the Bureau's June 1989 memorandum establishing the geographic pay program. The memorandum provided details on the rationale, anticipated costs, and development of the pay program. We interviewed Bureau officials responsible for developing the program to further identify the process the Bureau used to develop its pay rates and apply those rates to its district offices.

Our work was done between October 1989 and April 1990 at the Bureau headquarters in Suitland, Maryland, in accordance with generally accepted government auditing standards.

Geographic Wages Needed to Attract Sufficient Staff

The most fundamental staffing challenge confronting the Bureau is ensuring that its pay rates are competitive. The Bureau was able to recruit a sufficient number of qualified employees during most of the test censuses it held to prepare for the 1990 decennial census. However, the Bureau experienced serious recruiting difficulties in some areas when it began to recruit for census address list development activities in 1988. These recruiting problems forced the Bureau to raise pay to attract sufficient staff.

The Bureau increased pay for enumerators and selected other field staff during its 1988 suburban and rural address development effort in east coast states where it had exhausted all other recruiting strategies.³ Enumerator pay was increased from \$5.50 to \$8.00 per hour in New Jersey; Connecticut; parts of Maryland and Virginia in the Washington, D.C., metropolitan area; and parts of Pennsylvania and New York.

³1990 Census: Delays in Completing the Address List for Suburban and Rural Areas (GAO/ GGD-89-74, July 1989).

According to the Bureau, the \$8.00 per hour pay rate was established arbitrarily in 1988, but the Bureau believes it contributed to attracting applicants. For example, in Northern Virginia, 200 persons had been recruited before the pay increase, but in the 2-week period after the pay increase was implemented, 500 applicants were recruited. However, the Bureau's evaluation of the results of the pay increase was limited to two of the six areas where the increases were used—Connecticut and Northern Virginia—because data were not available on the results of the pay increase from the other locations.

Recruiting difficulties in 1989 led the Bureau to increase pay for enumerators and other staff in the state of New York and parts of Massachusetts to complete fieldwork. Enumerator pay was raised from either \$5.50 or \$6.00 per hour to \$7.00 per hour in these areas.⁴ After the pay increase, most areas were able to hire sufficient staff to complete the Bureau's 1989 urban address list development field activity on schedule. However, the White Plains and Hempstead district offices in the New York region and the Worcester office in the Boston region experienced staff shortages despite the increase in enumerator pay and completed the field activity at least 1 week late.

Title 13 of the U.S. Code authorizes the Secretary of Commerce to establish administratively determined pay rates for temporary employees hired for the decennial census and related activities. In a series of testimonies during 1988 and 1989, we encouraged the Bureau to consider a geographic pay system that would be sensitive to labor market conditions and competitive with local wage rates.⁵ The Bureau subsequently developed and implemented a district office geographic pay program for the 1990 census.

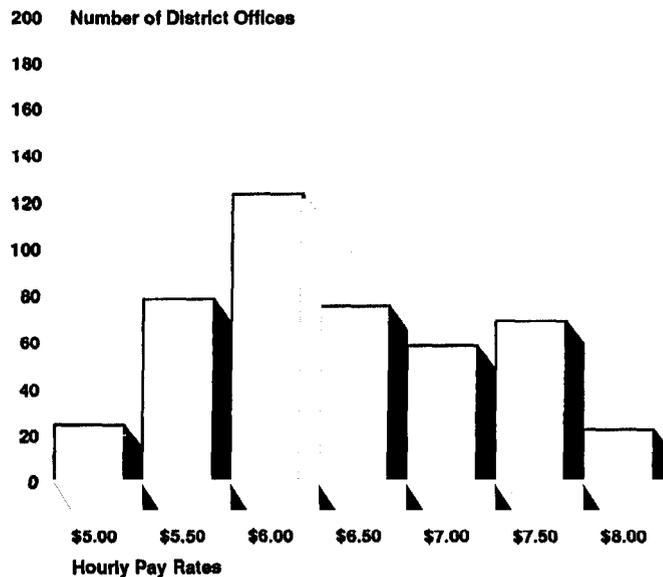
Most of the temporary census employees the Bureau is hiring for the census will be enumerators. While enumerator pay rates for 1990 originally had been planned to be either \$5.50 or \$6.00 per hour, the geographic wage program contains seven different wage levels, with enumerator pay increasing at \$.50 intervals and ranging from \$5.00 to \$8.00 per hour.

⁴See 1990 Census: Enhanced Oversight Should Strengthen Recruitment Program (GAO/GGD-90-65, April 1990) for a discussion of the results of the Bureau's 1989 recruitment efforts and the challenges it faces recruiting for the census.

⁵Status of Plans for the 1990 Decennial Census (GAO/T-GGD-89-20, May 5, 1989); Status of Plans for the 1990 Decennial Census: An Update (GAO/T-GGD-89-15, March 23, 1989); Status of the 1990 Decennial Census (GAO/T-GGD-88-53, Sept. 27, 1988).

Figure 1 shows the number of the Bureau's 449 district offices in each pay level at the start of nonresponse follow-up. The pay levels are identified by their respective hourly enumerator pay rates. The Bureau may need to increase pay rates in some offices if it is unable to attract the additional staff needed to address the increased workload from the low mail response rate.

Figure 1: Geographic Pay Rate Levels as of April 1990



Note: Pay rate levels are shown by hourly enumerator pay rates.

We believe that the Bureau's decision to use the pay setting flexibility authorized in Title 13 represents an important advance over its previous pay plans and should make a major contribution toward enabling it to compete for needed staff.

Low Census Response Rate Will Increase Cost of Geographic Wages

Personnel expenses for temporary census employees will be the single most costly item in taking the census in 1990. The Bureau anticipates it will spend about 70 percent of its fiscal year 1990 decennial census appropriation of \$1.3 billion on personnel costs for temporary employees.

The Bureau identified sources of funding to meet the approximately \$50 million in increased costs that it estimated would be needed to increase

wages under the geographic wage program. The Bureau will use about \$38 million from its \$73.5 million fiscal year 1989 carryover to fund the geographic pay program. The carryover funds used for the geographic wage program primarily were derived from lower than budgeted census questionnaire printing costs and improved productivity and other staff savings. A Bureau official said that the balance—about \$12 million—will come from funds designated in the Bureau's fiscal year 1990 appropriation.

However, the lower than expected census response will cause personnel costs associated with the geographic wages to increase. The Bureau's estimate of the additional cost resulting from the use of geographic wages was based on the expected 70 percent census questionnaire response rate. However, the Bureau achieved about a 63 percent response rate as of April 19. As a result, the Bureau may need to hire as many as 37,100 additional employees because it estimates that for every percentage point below the expected 70 percent response rate, it needs to hire about 5,300 employees. The Bureau has not released estimates of the increased costs from hiring these additional employees using the geographic wage rates.

At a minimum, the lower than expected response rate will add over \$70 million to the total cost of the census. The Bureau has estimated that each percentage point below the expected response rate results in about \$10 million in additional follow-up costs, which primarily are personnel costs from hiring additional temporary workers. This estimate was developed before the Bureau implemented its geographic wage program and assumes the Bureau's pay rates for enumerators would be either \$5.50 or \$6.00 per hour, rather than the \$5.00 to \$8.00 hourly pay rates contained in the geographic wage program. Therefore, additional costs from the geographic wage program will add to the \$70 million in follow-up costs.

Uncertainty About Competitiveness Makes Geographic Pay Program Vulnerable to Cost Increases During the Census

The Bureau is satisfied that overall its geographic pay rates will be sufficient to compete for needed staff. However, the Bureau has noted that in the event that its pay rates are not adequate to attract sufficient staff, it will have to increase pay during the census. According to the Bureau's June 1989 memorandum establishing the pay program, increasing pay rates during the census will require it to modify census plans to absorb the added costs or request additional funding from Congress.

The Bureau cannot be certain that its pay rates are adequate in all areas as significant census hiring continues. Unlike many other key components in the census, the Bureau's pay rates have not been tested under census-like conditions, because the geographic wage program was not implemented until after the Bureau had completed its field tests for the 1990 census.

According to the Bureau, it evaluated a number of alternative approaches to designing its pay program and determined that identifying a position comparable to the census enumerator was not feasible. As a result, the Bureau did not use a detailed market analysis to develop its geographic pay rates. The Bureau did not document the basis for its determination, and we were not able to assess its efforts in this area.

The Bureau developed a model to show the relative pay needs of its district offices to assist it in determining pay rates. For example, the model showed that pay in New York should be higher than pay in St. Louis but did not identify the actual pay rates that the Bureau should offer in each locality. According to the Bureau, managers in headquarters and the field used the rankings identified by the model to provide general direction on which of the Bureau's seven pay levels each district office should offer to be competitive. The Bureau generally did not document the reason a pay rate was established for an individual office. As a result, we were not able to evaluate the pay decisions that Bureau officials made for specific offices.

In the absence of testing the wage rates under census-like conditions and a detailed market analysis, the Bureau established its 1990 pay levels based in part on its hiring experiences during precensus field activities. However, these precensus field activities differ significantly from the actual census because the degree of public contact during precensus activities generally is much less than during the census. Most enumerators hired for the census will visit households to gather information from those that have not returned a census questionnaire. Contact with

a resistant public contributes to turnover and discourages potential applicants, according to Bureau officials.

The Bureau decided to use a maximum 1990 enumerator pay rate of \$8.00 per hour based on the results of the pay increases it used in 1988. However, the Bureau is offering enumerator pay rates below \$8.00 per hour in the district offices covering areas where it raised pay to this level in 1988.⁶ The 1990 enumerator pay rates in the 21 district offices covering areas where the Bureau increased pay in 1988 are between \$.50 and \$2.50 per hour below what the Bureau offered in 1988. About half of the district offices in these areas will offer enumerator pay rates at least \$1.00 per hour below the 1988 pay rate.

The Bureau believes it will recruit successfully despite the lower pay rates, because it has a census promotion effort and a network of local district offices to recruit, neither of which existed in 1988. In addition, the Bureau plans to provide supplemental payments during certain census activities, including nonresponse follow-up, to enumerators and other field staff who meet productivity goals and continue working for a specified period of time. These payments could add the equivalent of over \$1.00 per hour to enumerators' pay.

Nonetheless, in the event the Bureau is unable to hire a sufficient number of staff it may be forced to increase wages. We estimate, on the basis of the Bureau's staffing projections for district offices in areas that had the \$8.00 pay rate in 1988, that if the Bureau raises 1990 nonresponse follow-up pay to the \$8.00 level in all areas covered by the 1988 pay increase, the additional costs resulting from increased enumerator and field supervisor wages would be about \$1.5 million. However, the Bureau's district office staffing projections were based on the expected 70 percent response rate. Since the actual census response rate is less than 70 percent, these costs will increase significantly if the Bureau is forced to hire a large number of additional staff in these areas in addition to raising pay.

The Bureau implemented lower pay rates elsewhere in the country partly to offset the increased costs of the geographic wage program. Throughout the 1990 census cycle, the Bureau had planned that the minimum enumerator pay rate it would offer for the census would be

⁶The only area where the Bureau is planning an \$8.00 per hour enumerator pay rate for the census is in the New York region, which covers New York City and surrounding counties. Enumerators in 22 of the region's 28 district offices will receive the \$8.00 per hour pay rate.

\$5.50 per hour. However, to limit costs, the Bureau's geographic wage program established a \$5.00 per hour enumerator pay rate for 24 of its 449 district offices.

The increase in census costs if the Bureau needs to raise pay in these offices is relatively modest compared with the overall cost of the census. We estimate, on the basis of the Bureau's staffing projections for these 24 offices, that if the Bureau raises pay back to the \$5.50 per hour wage level for nonresponse follow-up, the cost increase from additional wages for enumerators and field supervisors would be about \$223,700. These costs would increase further if offices are forced to raise pay and hire additional staff to address the increased follow-up workload.

We did not determine the likelihood that the Bureau will need to raise wages to attract sufficient staff. However, we believe that the Bureau's 1990 recruiting performance to date provides an indication of the difficulties the Bureau may face in hiring sufficient staff for the census. In addition, a successful recruiting program is especially important now that the Bureau will need to hire thousands of additional employees to complete follow-up activities.

The Bureau generally has not met its recruiting milestones for the census. For example, the Bureau did not meet its milestone of achieving 70 percent of its 1990 recruiting goal by March 16. According to district office reports in the Bureau's management information system, the Bureau had met 44 percent of its recruiting goal for 1990 by March 16. When examined at local levels, the results appear even less favorable. About 91 percent of the Bureau's district offices, where the recruiting and hiring actually take place, reported that they did not meet the 70-percent milestone. About 65.7 percent of the Bureau's district offices reported that they had met less than 50 percent of their 1990 recruiting goal.

The Bureau also did not meet its milestone of achieving 100 percent of its 1990 recruiting goal by April 6. Nationally, the Bureau reported meeting about 62 percent of its recruiting goal as of April 14. About 29 percent of the Bureau's district offices reported that they had met 50 percent or less of their 1990 goal.

Conclusion

The Bureau's decision to implement a geographic wage program is an important step that should better enable it to compete for the staff it

needs. The Bureau identified sources to fund the increased costs it originally estimated would result from its use of geographic wages, but the cost of the program will now increase due to the lower than expected census response rate. In addition, the program remains vulnerable to further cost increases as the census continues. The Bureau cannot be certain that its pay rates are competitive because it was not able to evaluate its geographic wage rates under census-like conditions. Since the Bureau did not document either the basis for its decision to develop pay rates without completing a market analysis or how it determined the appropriate pay rates for its district offices, we were unable to assess its efforts on these issues.

Agency Comments

We did not obtain official comments from the Bureau on this report. We did, however, discuss the issues presented in the report with responsible Bureau officials. They believe that the Bureau's wage rates will be sufficient to compete for needed staff. We have incorporated this view and other comments where appropriate.

As arranged with the Subcommittee, we are also sending copies of this report to other appropriate congressional committees; the Secretary of Commerce; the Director of the Bureau of the Census; and the Director, Office of Management and Budget. Copies also will be made available to other interested parties upon request.

The major contributors to this report are listed in the appendix. If you have any questions concerning this report, please contact me on 275-8676.



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